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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SHARMA, SUJATHA R

ART UNIT	PAPER NUMBER
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2681

DATE MAILED: 07/17/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/439,348

Applicant(s)

FEBVRE ET AL.

Examiner

Sujatha Sharma

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15, 18 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-9 is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-15, 18 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 101

Claims 11-15 and 26-28 are rejected under 35 U.S.C. 101 because the claims are directed to a signal and data burst that contains non-functional descriptive material.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott in view of Tomota [JP 407046660 A].

Regarding claims 1,18 Scott discloses a method for timing adjustment control method for an efficient time division duplex communications. Scott further discloses a method of receiving a burst transmission from a transceiver in a time slot and calculating a timing correction value to synchronize the transmission timing with the reference and transmitting the said correction value to the transceiver. See abstract and summary of invention, col.7, lines 52-65, col.11, 23-40.

Scott however does not disclose a method of receiving a burst with a time slot indication indicating a time slot within which the burst was transmitted.

However, it is well known in the art a method of transmitting timeslot indication indicating the position of a time slot in the frame that carries control information as taught by the secondary reference Tomota. See abstract.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Tomota to Scott for proper decoding of information at the receiver.

Regarding claims 2 and 5, Scott further discloses a method of transmitting to the transceiver a time slot allocation in a plurality of time slots. See abstract, column 7, lines 52-65, column 8, line 55 – column 9, line 24.

Regarding claim 3, Scott further discloses the plurality of time slots forming a sequence block whose length is greater than the maximum variation in the propagation delay. See column 7, line 52 – column 8, line 25.

Regarding claim 4 Scott discloses a method for timing adjustment control method for an efficient time division duplex communications. Scott further discloses a method of receiving a burst transmission from a transceiver in a time slot and calculating a timing correction value to synchronize the transmission timing with the reference and transmitting the said correction value to the transceiver. Scott further discloses a method where the transceiver sends the subsequent transmissions according to the timing correction value. See abstract and summary of invention.

3. Claims 6,10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott [US 6,388,997] and Tomota [JP 407046660 A] in view of Kronz [WO 99/00931].

Regarding claim 6, Scott as treated in claim 4 does not disclose a method of selecting the time slot randomly.

Kronz teaches a method of selecting a time slot randomly. See page 11, lines 7-18.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to include the above teachings of Kronz in Scott's invention in order to

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allow the user to send a reservation request for transmission of data signal prior to obtaining a time slot allocation for data transmission.

Regarding claim 10, Scott discloses a method for timing adjustment control method for an efficient time division duplex communications. Scott further discloses a method of receiving a burst transmission from a transceiver in a time slot and calculating a timing correction value to synchronize the transmission timing with the reference and transmitting the said correction value to the transceiver. Scott further discloses a method of receiving the transmissions in the allocated time slot. See abstract and summary of invention.

Scott however does not disclose a method of indicating to other users after a channel is allocated to a particular user.

Kronz teaches a method of allocating a channel and indicating to other users that the said channel is unavailable. See page 4, lines 4-15.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to include the above teachings of Kronz in Scott's invention in order to avoid collisions when users try to transmit in the same time slot.

Allowable Subject Matter

4. Claims 7-9 are allowed over prior art.

The closest prior art Scott [6,388,997] does not disclose a method determining a timing uncertainty value and transmitting the said value to the transceiver. Therefore the claims 7-9 are allowed.

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Response to Arguments

5. Applicant's arguments with respect to claims 1-6, 10 and 18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Paivike US 6,396,827 May 28, 2002

Devile EP 629095 A2 Dec. 14, 1994

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 703-305-5298. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ^{Dwayne Bost} ~~Vivian Chin~~ can be reached on 703-³⁰⁵⁻⁴⁷⁷⁸ ~~308-6739~~. The fax phone numbers for the organization where this application or proceeding is assigned and for all official communications is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

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Sujatha Sharma

February 5, 2003


ERIKA GARY
PATENT EXAMINER